



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.usspto.gov

			•			
APPLICATION NO.	FILD	NG DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/750,833 12/29/2000		29/2000	Don Eden Hale	10010039-1	9194	
57299	7590	05/04/2006		EXAM	EXAMINER	
AVAGO TECHNOLOGIES, LTD.				NGUYEN	NGUYEN, TAN D	
P.O. BOX 192	20					
DENVER, CO 80201-1920			ART UNIT	PAPER NUMBER		
				3629		

DATE MAILED: 05/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)				
		09/750,833	HALE ET AL.				
	Office Action Summary	Examiner	Art Unit				
		Tan Dean D. Nguyen	3629				
Period fo	The MAILING DATE of this communication app or Reply	pears on the cover sheet with the c	orrespondence address				
A SH WHIC - Exter after - If NO - Failu Any (ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DATE of time may be available under the provisions of 37 CFR 1.15 SIX (6) MONTHS from the mailing date of this communication. Period for reply is specified above, the maximum statutory period ver to reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim will apply and will expire SIX (6) MONTHS from , cause the application to become ABANDONEI	l. lety filed the mailing date of this communication. O (35 U.S.C. § 133).				
Status							
2a)⊠	<i>,</i> —	action is non-final.	secution as to the merits is				
٥,۵	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Dispositi	on of Claims	,					
5)□ 6)⊠ 7)□	Claim(s) 1,2,4-12 and 14-20 is/are pending in (4a) Of the above claim(s) is/are withdraw Claim(s) is/are allowed. Claim(s) 1-2, 4-12 and 14-20 is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction and/o	wn from consideration.					
Applicati	on Papers						
9)[The specification is objected to by the Examine	r.					
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
, —	under 35 U.S.C. § 119						
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 							
	t(s) e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948)	4)					
3) Inform	mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) r No(s)/Mail Date		atent Application (PTO-152)				

Art Unit: 3629

DETAILED ACTION

Response to Amendment

- 1. The amendment filed 2/13/06 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows:
- (1) lines 8-9, "computers of the virtual distributor alliance and virtual flows", and "all members of said virtual manufacturer alliance being configured to perform a same type of operations" from previous amendment of 9/13/05; and
- (2) lines 15-17, "computers of the virtual manufacturer alliance and virtual flows", "all members of said virtual distributor alliance being configured to perform a same type of operations as each other", (from previous amendment of 9/13/05, and "and being configured to not perform different types of operations from each other".

Applicant is required to cancel the new matter in the reply to this Office Action.

Response to Arguments

- 2. Applicant's arguments filed 2/13/06 with respect to 2 issues:
- (1) finality of the previous office action mailed 12/21/05 is persuasive and the finality of the previous action has been withdrawn.
- (2) as for the objection issues above, applicant's arguments have been fully considered but they are not persuasive. Applicant's comment "the claim language was indeed not copied verbatim from the specification, but the substance of the limitation is found in Figs. 3-4". Figs. 3-4 are reviewed by the examiner and show that

"MANUFACTURER ALLIANCE" (14) and "MANUFACTURER ALLIANCE" (16) appear to (1) connect to each other through the "MAT'L" flow (32) and (2) to the "INFORMATION FLOWS" (40) through the arrow (42). There is nothing in here to say that "all members of said virtual manufacturer alliance being configured to perform a same type of operations as each other".

Similarly, Figs. 3-4 are reviewed by the examiner and show that "REGIONAL WAREHOUSE" (18) appear to (1) connect to "MANUFACTURER ALLIANCE" (16) through the "PRODUCT" flow (34) and (2) to the "FINANCIAL FLOWS" (50) through the arrow (52). There is nothing in here to say that "all members of said virtual distributor alliance being configured to perform a same type of operations as each other" and "and being configured to not perform different types of operations from each other".

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

The rejections of claims <u>1</u>-2, 4-10 (method), <u>11</u>-12, 14-20 (system) under 35
 U.S.C. 101 are withdrawn due to applicant's amendment.

Terminal Disclaimer

5. The terminal disclaimer filed on 9/13/05 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of copending application 10/117,471 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Art Unit: 3629

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 7. Claims 1-2, 4-10 (method), 11-12, 14-20 (model) are rejected under 35 U.S.C. 103(a) as obvious over (1) VAN HOEK (Article "Logistics and virtual.... Information", 1998) alone or further in view of (2) HAMMER (Article "The rise ...the rest", March 2000).

As for independent method claim 1, VAN HOEK discloses a computed-implemented method of using a business model of virtual integration to transact business process for a product in a virtually integrated supply chain management (or SCM) throughout the entire chain {see page 1, lines 46-48 "in purchasing, manufacturing, and shipping (distributing)} comprising the steps of:

- a) <u>providing</u> a virtual business function (manufacturing) <u>alliance</u> (or <u>partnering</u> or <u>cooperation</u> among <u>various players</u>) comprising members wherein the members are interacting with each other by computers (see page 2, paragraphs 3-4, or lines 38-39 for "outsourcing, <u>partnering</u> and co-operation among <u>various players</u>", page 6, 3rd paragraph, page 7, 4-6 paragraphs},
- b) <u>providing</u> a virtual business function (distributing) <u>alliance</u> (or partnering) ("(1) outsourcing, (2) partnering and (3) co-operation among various players"), and every

virtual distributor alliance (partnering) member can interact with each other by computers and being configured to perform operations associated with distribution of the manufactured product {see page 8, lines 7-10, "five interregional distribution centers ... will supply the dealer with the requested car within as order-to-delivery"};

- c) providing a plurality of virtual <u>communication flows</u> (dialogue or interchange or conversation) for enabling electronic communication between the virtual alliances (partners) for use in the 1st function (manufacture) and 2nd function (distribution) of the product, the virtual flows having access to the virtual alliances (partnering) at each stage of the manufacture and distribution of the product, the virtual flows managing a flow of information along the virtual flows between alliance members (see page 1, abstract "<u>extensive</u> involvement of suppliers and distributors, and the integration of the flow of information", page 2, lines 1-7, 41, 52-53, page 6, line 20, page 9, lines 1-5);
- d) providing a contracting business for coordinating operations of virtual alliances (partnering and cooperating players) {see page 1, line 49 "outsourcing and sub-contracting" and lines 38-39 "outsourcing, partnering and co-operation among various players"; and
- e) using the contracting business to establish, via the virtual flows, control over well known 1st and 2nd business functions (manufacturing and distribution of product) by the plurality of virtual alliances (partnering and cooperating players) { page 2, lines 1-5 "company achieves control ... by mastering the flow of information", page 8, lines 32-35 "maintains control over the supply chain by controlling and integrating the flow of information"}.

As for the limitation of "all members of the alliance being configured (is equipped or capable of) to perform a same type of operations", this is not positively claimed in a method claim since it merely further limits an "object" or "members" in the step and not "providing" in this case. Also, "being configured" merely means "being equipped" or "having a capacity" to do something, such as performing a same type of operation associated with manufacturing or distribution of product, thus having little or nearly no patentable weight in a method claim. Moreover, this is inherently taught in VAN HOEK pages 2, 3 with an example on page 7, par. 4-6, , "... number of 1st tier suppliers of which seven are fully integrated into the final assembly plant", .."... together these seven suppliers supply 50% of the total value of the purchased product". Clearly, the seven suppliers are equipped or capable of doing the same type of job or different jobs depending each scenario or economic decisions. In other word, doing the same type of work or different type of work is not a critical issue since the alliance members are designed to handle any of the work required, same or different, depending on well known product parameters such as cost, design, availability, etc.

VAN HOEK fairly teaches the claimed invention except for further specific limitation in step (a) of 1st function (manufacturing) alliance comprising a plurality of manufacturer alliance members, every member of the alliance being configured to perform operations associated with the 1st function (manufacturing) of the product. However, on page 7, lines 30-32, discloses the integration of "by a number of 1st tier suppliers of which seven are fully integrated into the final assembly plant", lines 52-54, "close participation of the suppliers in the final assembly of the car, but the suppliers are

also strongly involved in the development, planning and <u>launching</u> of the product, therefore, it would have been obvious to modify a portion of the teaching of VAN HOEK as disclosed in steps (a) - (e) above by including a 1st function (manufacturing) alliance comprising a plurality of manufacturer alliance members (suppliers), every member (supplier) of the alliance being configured to perform operations associated with the 1st function (manufacturing) of the product as taught in another portion shown on page 7 indicated above.

Alternatively, in another similar virtual business integration model involving "SCM", HAMMER discloses the carrying out of step (a) above (some of the suppliers are responsible for manufacturing along with the manufacturer.... Members of the virtual enterprise are tightly woven together) for the benefit of concentrating on processes at which you can be world-class or focus on their core competencies and rely on someone else (outsourcers) to perform the rest in a fast-moving technology, increase competition and the rise of the Internet {see page 2, lines 1-12, page 1, lines 1-10, 30-33, 40-43}. HAMMER discloses that this is one the most important Internet application (global computer network) for company to survive and be the best {see page 1, lines 1-5, lines 29-40}. It would have been obvious to modify the teachings of VAN HOEK by modifying step (a) as taught by HAMMER for the benefit cited above. Note that steps (d) and (e) are also taught in HAMMER page 1, lines 7-10 and 35-37.

As for dep. claim 2 (part of 1), which deals with other well known business functions parameters, i.e. material and material alliance (beside manufacturing and distributing as in claim 1), this is non-essential limitation to the scope of the claimed

invention and is fairly taught in VAN HOEK page 7, lines 30-55 "suppliers of materials/products/parts" or HAMMER page 2, lines 1-5 "vehicle and parts suppliers". The connection of another alliance, material alliance is inherently included or would have been obvious in view of the teachings of VAN HOEK on page 1, lines 46-47, "in purchasing, manufacturing and shipment". As for the limitation of "to perform a same type", this is rejected for the same reason set forth in claim 1 above.

As for dep. claim 4 (part of 1), which deals with other well known business functions parameters, i.e. connection of distributor with warehouse or storage/storing area, this is non-essential limitation to the scope of the claimed invention and is fairly taught in VAN HOEK page 2, line 58 "storing finished goods", page 8, lines 10-15 "store the appropriate components".

As for dep. claims 5-7 (part of 1), which deals with other well known business information flow (exchange/interchange/dialogue) parameters, i.e. product, financial, etc., these are non-essential limitation to the scope of the claimed invention and are fairly taught in VAN HOEK page 1, lines 35-40, page 2, lines 1-7. Alternatively, the inclusion of other well known information of business parameter such as material/product, information, marketing and finance, etc., would have been obvious as mere monitoring other well known business information in the virtually integrated supply chain of VAN HOEK.

As for dep. claim 8 (part of <u>1</u>), which deals with other <u>well known</u> business information flow parameters, i.e. contracting related information, this is <u>non-essential</u>

limitation to the scope of the claimed invention and shown in page 2, lines 5-7, 40-44, page 8, lines 20-40.

Page 9

As for dep. claim 9 (part of $\underline{1}$), the limitation of virtual regional hubs or distribution centers located regionally is taught on page 8, lines 5-10, or page 1, lines 30-40, wherein it's well known that computer parts for Dell are made throughout the world such as Taiwan, China, Malaysia, Mexico, etc., and the parts are assembled and sold in the United States and therefore, virtual regional hubs are created outside the United States to communicate effectively. Moreover, it's well known to an artisan that the degree/effectiveness of coordination/control varies with the number of alliances, the type of organization, geographical locations of each alliance (supplier or manufacturer), operating time of each alliance, etc., therefore, the adjusting of the control degree or effectiveness is considered as optimizing operating conditions or result effective variables and the optimizing of result effective variables is considered as routine experimentation to determine optimum or economically feasible reaction conditions and would have been obvious to the skilled artisan. In re Aller, 105 USPQ 233. For example, if the alliances is scattered throughout the globe, i.e. China, Philippine, Europe, Africa, U.S., it would have been obvious to form regional hub to effectively coordinate the communication between the alliances due to the large distance between each alliance.

As for dep. claim 10 (part of 1), which deals with well known business parameters to facilitate responsiveness in upstream integration with suppliers and downstream integration with suppliers and customers, i.e. automatically triggering

financial transaction upon integrating of financial flows and information flows, or in other word, triggering an invoice or collection upon completing shipping an order to a customer, this automatic triggering concept is fairly taught in VAN HOEK page 6, lines 15-24 for ordering products at point of sale or HAMMER page 2, lines 20-23.

Alternatively, the application of virtual information flows monitoring and management to other well known business transaction parameters, such as finance, payment, billing, credit/collection, etc., would have been obvious to a skilled artisan as mere applying the same modeling process to other well known or similar business parameters to complete a business transaction for a product in view of the teaching of monitoring all information related to the manufacturing and selling of product as taught by VAN HOEK above.

As for independent <u>model</u> claim <u>11</u>, which is a computer-implemented virtual business <u>model</u> to transact business for a product of claim 1 above, it's also rejected (2nd time) for the same reason set forth in claim 1 above with respect to the model limitation.

As for dep. claims 12, 14-20 (part of 11), which have the same limitations as in dep. claims 2, 4-10 above, they are rejected (2nd time) for the same reasons set forth in dep. claims 2, 4-10 above.

8. Dependent claims 7, 10 are rejected (2nd time) under 35 U.S.C. 103(a) as being unpatentable over VAN HOEK alone or VAN HOEK /HAMMER as applied to claims 1-2, 4-10 above, and further in view of LEWIS et al (Article 1997).

The teachings of VAN HOEK or VAN HOEK /HAMMER are cited above. As for dep. claims 7, 10, in a similar business environment for virtual business enterprise due

Art Unit: 3629

to outsourcing and sub-contracting and the calling for a "value-added partnerships (or strategic alliances)", LEWIS et al is cited to control of information flows in a virtual flow train or rail wherein the information includes other well known business information such as financial flow (purchase order, waybills, and payments) to complete the management of a business transaction of a product or service (see pages 2, 3, 4, especially lines 15-20, page 5, lines 36-40,). It would have been obvious to modify the process of VAN HOEK alone or VAN HOEK / HAMMER to include other well known financial information as taught by LEWIS et al to complete the management of a business transaction of a product/service and/or completion of the Supply Chain Management or Logistics

Processes Management. Moreover, it would have been obvious to modify the process of VAN HOEK alone or VAN HOEK /HAMMER to clearly and definitively provide a plurality of virtual alliances for the manufacturing and distribution in view of the teaching of a "value-added partnerships (or strategic alliances)" as mentioned by LEWIS et al above.

Response to Arguments

- 9. Applicant's arguments filed 2/13/2006 have been fully considered but they are not persuasive.
- (1) Applicant's comment that the SCM disclosed in Van Hoek does not disclose that the members, each of which is "capable of" performing the <u>same</u> task is noted; however, as indicated in the rejection of claim 1 above, this is <u>not positively claimed</u> in a method claim since it merely further limits an "object" of the "providing" step or

"members" in the step and not the step of "providing" in this case. In other word, it merely limits the type of members or adding features to the members which are not critical. Also, "being configured" merely means "being equipped" or "capable of" (as shown in Applicant's response, 9-13-05, pages 10-13) to do something in the future, such as performing a same type of operation associated with manufacturing or distribution of product, thus having little or nearly no patentable weight in a method claim. If applicant wants to enhance the patentability of the claimed language, adding the following phrase "wherein all members of said virtual manufacturer alliance perform a same type of operations associated with manufacturing said product" and "wherein all members of said distributor alliance perform a same type of operations as each other associated with distribution of the manufactured product".

Moreover, this is inherently taught in VAN HOEK pages 2, 3 with an example on page 7, par. 4-6, , "....number of 1st tier suppliers of which seven are fully integrated into the final assembly plant", ..."... together these seven suppliers supply 50% of the total value of the purchased product". Clearly, the seven suppliers are equipped or capable of doing the same type of job or different jobs, depending each scenario or economic decisions. In other word, doing the same type of work or different type of work is not a critical issue since the alliance members are designed to handle any of the work required, same or different, depending on well known product parameters such as cost, design, availability, etc.

(2) Applicant's argument, similar to the one above, but with respect to "same type of operations associated with distribution of the manufactured product" is noted,

Art Unit: 3629

however, the teaching of "distribution" is taught in VAN HOEK alone or VAN HOEK /HAMMER and the issue of "same type" is discussed above.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

No claims are allowed.

11. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through private PAIR only. For more information about the PAIR system, see http://pair-direct@uspto.gov. Should you have any questions on access to the private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free).

In receiving an Office Action, it becomes apparent that certain documents are missing, e. g. copies of references, Forms PTO 1449, PTO-892, etc., requests for copies should be directed to Tech Center 3600 Customer Service at (571) 272-3600, or e-mail CustomerService3600@uspto.gov.

Any inquiry concerning the merits of the examination of the application should be directed to <u>Dean Tan Nguyen at telephone number (571) 27**2**-6806</u>. My work schedule is normally Monday through Friday from 6:30 am - 4:00 pm. I am scheduled to be off every other Friday.

Should I be unavailable during my normal working hours, my supervisor John Weiss may be reached at (571) 272-6812. The <u>FAX phone</u> numbers for formal communications concerning this application are <u>(703) 872-9306</u>. My personal Fax is <u>(571) 273-6806</u>. Informal communications may be made, following a telephone call to the examiner, by an informal FAX number to be given.

dtn May 1, 2006

DEANT. NGUYEN